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ABSTRACT

The paper describes a group desensitization program aimed at assisting students to perform to the best of their ability in a testing situation if they suffer from extreme debilitating anxiety. Since the problem is pervasive and the number of trained limited, the author suggests that the group program is an efficient and effective method of attacking test anxiety. The program described here has been used with Georgia State University students who either volunteered or were professionally referred. The number, length, and spacing of meetings is discussed as well as an outline of the content of the sessions. The first session is spent discussing systematic desensitization in simple terms, talking about tests, anxiety, and an orientation to what lies ahead. The next two or three sessions are devoted to learning deep muscular relaxation, while the last four to six are spent going through the hierarchy. The role of the counselor as a fascilitator of such programs in preventative mental health is also examined. (Author/SES)

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Group Systematic Desensitization to Test Anxiety

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Rats no longer have the corner on the behavioral psychological market. The painstaking work of Pavlov and Skinner in the laboratory can now be applied to human beings. Through the efforts of such people as Wolpe, Eysenck, Stampl, and Krumboltz, behavioral principles are being translated into effective techniques to deal with a wide variety of human psychological malaise.

Professional persons working in a facilitative role within academic institutions have the onus of whether or not their clientele enjoy the gains to be received from being exposed to experiences that can facilitate their growth. Along with the unique developmental tasks that face young adolescents are historical experiences and expectations they collect that complicate and interfere with the successful sense of mastery and achievement of identity. One such experience present throughout life, and especially salient during the institutional years of education, is the evaluative or testing experience.

A test used properly should be just one way of imparting knowledge, primarily to the testee and secondarily to the tester. There is nothing inherently toxic about a test. It is only when the child, adolescent, and young adult perceive

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that the test is not necessarily for his use, but for his abuse, that the test takes on a toxic threat value capable of interfering with a person's cognitive, affective, and physical functioning. The behavioral model lends itself quite nicely to the reversal of learned debilitating reactions to tests.

Since its inception during World War I, testing has become an impersonal, remote industry in the United States. Students from kindergarten to doctoral candidates are administered standardized tests which are used as screening and selection devices. Any wonder then that tests take on a real threat value when one knows that his or her future will depend on the results of such tests.

Accepting the fact that testing for whatever purpose will not be diminished in the near future, what can be done to assist people in performing to the best of their ability in a testing situation if they suffer from extreme debilitating anxiety?

A Desensitization Program

Anxiety to tests is not limited to just a few students; it is a pervasive problem. To work with students individually on this problem would be time consuming and not necessarily more effective as research is beginning to show (Mann, 1972; Katahn, Strenger, and Cherry, 1966; Kondas, 1967; Mann, 1969; Mann, 1970; Mann and Rosenthal, 1969; Suinn, 1968; Emery and Krumboltz, 1967). Assuming the extent of the problem and limited numbers of trained personnel, a group program is an efficient method of attacking test anxiety. Such a method, as cited by the

above authors, is proving to be effective in diminishing test anxiety.

Selection

The desensitization to test anxiety groups at Georgia State University are made up of students who have volunteered or students who have been professionally referred. Students are assigned to a group without regard for age, grade level, or sex.

Number, Length, and Spacing of Meetings

It has been the experience of this author that:

1. The number of sessions usually is between eight or ten;

2. Sessions should not last more than forty minutes;

3. The hierarchy should be completed as soon as possible.

The number of sessions will depend on the length of the hierarchy and the time needed to complete the teaching of deep muscular relaxation. The first session is usually spent discussing systematic desensitization in simple terms, talking about tests, anxiety, and an orientation to what lies ahead. The next two to three sessions are devoted to learning, through experience, deep muscular relaxation. The last four to six sessions are spent going through the hierarchy.

The length of sessions is very important for several reasons. Although being relaxed is a very comforting and tranquilizing experience, working at, or letting one's self be relaxed while imagining traumatic events can be a tiring experience. Thus,

holding the sessions to forty minutes (plus or minus five minutes) in length inhibits fatigue. Related to the fatigue problem is the question of motivation to continue the procedure. If the time commitment is minimized and fatigue is minimal, the probability of remaining in the group is increased as well as the increased probability of actual anxiety reduction.

The length of the sessions recommended above raises a basic question in terms of traditional desensitization procedures. Research is beginning to show that neurotic anxiety in relation to conditioned stimuli can be reduced through observation and/or vicarious experiencing of a desensitization procedure (Paul and Shannon, 1966; Ramsay, Barends, Brenker, and Kruseman, 1966; Ritter, 1968; Robinson and Suinn, 1969; Suinn, 1970; Suinn and Hall, 1970). Traditionally, the Wolpian technique requires a patient to successfully imagine a scene several times in succession without anxiety before proceeding to the next step in the hierarchy. The above research and this author's experience question the necessity for such a time consuming procedure and allows for more imaginative use of desensitization with larger groups. The procedure to be discussed requires the patient to imagine the scene a certain number of times and for a certain length of time (depending on the place of the item in the hierarchy). Whether or not anxiety is felt is of no immediate consequence to the treatment.

The spacing of sessions over a period of time is important to successful treatment. Recent studies (Dua, 1972; Suinn, 1970; Suinn and Idall, 1970; Robinson and Suinn, 1969; Ramsay,

Barends, Brenker, and Kruseman, 1966) indicate massed sequencing of desensitization sessions is more effective and efficient than sessions distributed over a greater time period. This author's experience, in relation to a wide variety of phobic situations, has been that patient involvement in the actual phobic situation, whether by accident or necessity, has a deleterious effect on the treatment. Patients do not live in a vacuum. Their lives do not end when they leave the treatment sessions. More often than not they experience or are faced with situations that precipitate anxiety. How realistic is it of Wolpe to ask his patients not to get involved in experiences that are related to items not yet imagined in the hierarchy? Massed sessions circumvent to some degree this Wolpian prescription and actually facilitate anxiety reduction.

Stage 1

Session 1 (1 - 1 1/2 hours)

The first session should be devoted to:

1. establishing a relaxed atmosphere;

2. allowing participants to discuss their test anxiety in general;

3. verbally introducing systematic desensitization, deep muscular relaxation, and an overview of the conditioning theory underlying retroactive inhibition;

4. discussing what a hierarchy means and how one is built;

5. told to come dressed casually for future sessions (girls in pants); and

6. given an assignment in which they are to build a test anxiety hierarchy.

This last step is optional. The therapist can chose to use a standardized test anxiety hierarchy he himself has built from experience or use a hierarchy standardized by someone else (see Emery and Krumboltz, 1967). This is a time consuming operation and in this author's experience, hierarchies built by different groups usually have only one or two discrepant items. If number 6 above is assigned, the members should be told to limit their hierarchy to 10 or 12 items and to make sure that differences between contiguous levels are not disproportionate in their anxiety arousing potential. It would help to give examples at this point. One example is, "You must not have an item that relates to being told you are going to have a test in two weeks and the next item relating to the morning of the test." The items should be one sentence long and capable of eliciting an image of a specific situation, specific objects, specific surroundings, etc.

Stage 2

Session 1 (40 minutes) through Session 2 or 3

Note: After 35 minutes have gone by during the deep muscular relaxation training, finish the exercise you are on and say, "When I count to 10, I want you to open your eyes and feel relaxed, refreshed, and comfortable (slowly). 1, 2, 3, ... 10. Just lie there a minute and become aware of how you feel. See you next time."

Have the clients get as comfortable as possible. Ideally,

if the room is big enough and carpeted, the clients should be asked to lie down on their backs. This position magnifies the effectiveness of the procedure. However, if room is not available, comfortable chairs should be used. If seated in chairs, clients should be told to sit comfortably in the chair with the lower back against the chair back. If this is not done, the lower back will begin to hurt if the clients half lies and sits in the chair. Have the clients take off any binding materials or clothing that could interfere with relaxation (shoes, vests, coats, glasses, etc.). Caution those persons with contact lenses to take them out and put them in their lens containers; otherwise, the eyes will become aggravated, which will interfere with total relaxation.

Tell the group to close their eyes and not talk until you direct them to do so (say this warmly but firmly). They should keep their eyes shut and not speak throughout the whole procedure.

Have them become aware of their bodies. "Become aware of the weight of your bodies against the floor." "Become aware of any tingling sensations." "Become aware of your breathing." "Breathe in a relaxed manner, taking longer to exhale than inhale." "Relax." "Just relax." "Let any tension you feel go."

The following is a standard procedure for instructing them to relax a certain area. This procedure can be repeated for every muscle system listed below. There are three standard steps for each exercise:

1. Full force;

2. Half as hard; and

3. Just imagining doing the exercise.

Exercise 1

Left and Right Foot away from the Forehead

A. Speaking slowly, casually, and in a relaxed, low tone of voice (loud enough to be heard, however), "Now, (pause) I want you, without lifting your leg, to gradually point the toes on your left foot away from your forehead. Increase the pressure and feel the tension, strain in the arch of the foot, the toes, shin, calf, and ankle." (Let them hold it for 10 seconds). Then say, "Relax, let your foot go. Feel the difference between the relaxed feeling and the tense feeling. Relax." (Let them relax for 10 to 15 seconds).

B. Now say, "I want you to point the toes of your left foot away from the forehead half as hard as you did the last time. Feel the slight tension, strain, and discomfort in the ankle, arch, shin, and calf." (Hold it for 10 seconds). Then say, "Relax, let your left foot go. Let it be loose and comfortable." (Let them relax for 10 or 15 seconds).

C. Now tell them to just imagine (without doing it) pointing the left foot away from the forehead. (Do this for 10 seconds). Then say, "Relax. Let your left foot relax." (Relax 10-15 seconds).

Repeat the above on the right foot. From now on instructions will be in somewhat abbreviated form. However, the therapist must not speak to the group in such a form. He or she should embellish each exercise, and step within each exercise, so that

the group knows exactly what to do. He or she should also continue to speak in a soft, audible, relaxed voice. Abbreviated instructions for the therapist are meant to save space only. Each substep of each exercise should contain the stated seconds of tension and relaxation.

Exercise 2

Left and Right Foot toward the Forehead

A. Say, "Now (pause I would like you to point the toes of your left foot toward the forehead. Gradually increase the pressure: Feel the strain and stress in calf, knee, ankle, and whole foot." (Hold 10 seconds). "Relax and let go." "Let your left foot be loose." (Relax 10-15 seconds).

B. Half as hard for Exercise 2 for left foot (Tense 10, Relax 10-15).

C. Imagine Exercise 2 for left foot (Imagine 10, Relax 10-15).

Repeat above for right foot.

(Note: Do not rush. Be calm and relaxed yourself.)

Exercise 3

Lift Left and Right Leg toward the Forehead

A. Tell them, "Now . . . raise your left leg, keeping it straight, as if to touch your forehead. Gradually increase the pressure. Hold it. Feel the tension and strain in the thigh, knee, stomach, and calf." (Hold for 8-10 seconds). "Relax. Let your left foot down, as if it were going through the floor. Relax your left leg." (Relax 10-15 seconds).

B. Half as hard on Exercise 3 for left leg (Tense 8-10 seconds, Relax 8-10 seconds.)

C. Imagine Exercise 3 for left leg. (Tense 8-10 seconds, Relax 8-10 seconds). Repeat above for right leg. Make sure you sensitize them to the feeling. " . . . Feel the tension and strain in the thigh, knee, stomach, and calf as your right leg is raised."

Exercise 4
Sucking in Stomach
(Without Tensing the Stomach Muscles)

A. "Now, I want you to suck in your stomach as if to touch your back bone. Feel the strain and discomfort in the stomach area." (Hold for 10 or 12 seconds). Then say, "Relax. Let your stomach come out and be loose and comfortable." (Relax 10 or 15 seconds).

B. Half as hard for stomach (Tense 10-12, Relax 10-15 seconds).

C. Imagine sucking in stomach (Tense 10-12, Relax 10-15 seconds).

Exercise 5

Tensing Stomach

A. "Now, gradually increasing the pressure, I want you to tense your stomach muscles by pushing down and out with your stomach muscles, as if in a silent grunt." "Feel the tension, strain, and discomfort." (Hold 10 seconds). "Relax. Let your stomach relax." (Relax 10-15 seconds).

B. Half as hard tensing your stomach (Tense 10 seconds, Relax 10-15 seconds).

C. Imagine tensing your stomach (Tense 10 seconds, Relax 10-15 seconds).

Exercise 6

Holding Breath

A. "I would like you to take as deep a breath as you can. Hold it. Feel the tension and strain in your chest. Feel the chest expand." (Hold 10-15 seconds). "Relax. Let it all out. Breathe deeply and evenly, taking longer to exhale than inhale. Breathe with your whole body. Breathe using your stomach and chest. Relax." (Relax 15 seconds).

B. Take in half as much air and hold it. (Hold 10-15 seconds, Relax 10-15 seconds).

C. Imagine holding breath (Hold 10-15 seconds, Relax 10-15 seconds).

Exercise 7

Arching Back

A. Speaking slowly say, "Now, I would like you to arch your back. Do this by keeping your seat against the floor, put pressure on the back of your head as you raise your shoulders and back off of the floor. Feel the strain in the small of the back and the tension in the neck, shoulders, and throat." (Hold 8-10 seconds). "Relax. Let your back down and relax your back, shoulders, and neck. Relax." (Re x 10-15 seconds).

B. Arch back half as hard (Tense 8-10 seconds, Relax 10-15 seconds).

C. Imagine arching back (Imagine Tense 8-10 seconds, Relax 10-15 seconds).

Exercise 8

Shoulders

A. "I'd like you now to raise your shoulders as if to touch your ears. Feel the tension and strain in the shoulders, neck, and back." (Hold 10 seconds). "Relax. Let your shoulders down. Relax." (Relax 10-15 seconds).

B. Raise shoulders half as hard (Tense 10 seconds, Relax 10-15 seconds).

C. Imagine raising shoulders (Tense 10 seconds, Relax 10-15 seconds).

Exercise 9

Head and Neck

A. "Now, raising your head, force your chin into your chest. Feel the tension and strain in the back and front of your neck. Feel the strain in your jaw." (Hold 10 seconds). "Relax. Let your head down and relax. Relax." (Relax 10-15 seconds).

B. Half as hard (Tense 10 seconds, Relax 10-15 seconds).

C. Imagine raising head and forcing chin into your chest (Tense 10 seconds, Relax 10-15 seconds).

Exercise 10

Lips

A. "I would like you to purse your lips together tightly. Feel the strain in your lips, nose, and face." (Hold 10 seconds). "Relax. Let your lips go. Relax your lips and jaw." (Relax 10-15 seconds).

Exercise 11

Tongue

A. "Now, force the tip of your tongue against the roof of your mouth. Feel the tension in the lower tongue, in your jaw, and in your neck." (Hold 10 seconds). "Relax. Let your tongue find a comfortable resting place. Relax." (Relax 10-15 seconds).

B. Half as hard with tongue against roof of mouth (Tense 10 seconds, Relax 10-15 seconds).

C. Imagine tongue against roof of mouth (Tense 10 seconds, Relax 10-15 seconds).

Exercise 12

Jaw

A. "Now I'd like you to separate your jaws and open your mouth as wide as you can, as in a silent scream. Feel the tension in the jaw, corners of the mouth, neck, and upper chest." (Hold 10 seconds). "Relax. Let your jaw relax completely. You should not have your teeth together. Let your jaw be loose and relaxed." (Relax 10-15 seconds).

B. Half as hard with jaw open. Again stress feeling as above in 12-A. (Tense 10 seconds, Relax 10-15 seconds). Emphasize relaxing jaw, teeth apart.

C. Imagine 12-A (Tense 10 seconds, Relax 10-15 seconds).

Exercise 13

Look to Left and Right

A. "Now, without moving your head or opening your eyes, I

want you to move your eyes to the right as hard as you can. Notice the strain in your eyes and ears." (Hold 5 to 10 seconds). "Relax. Let your eyes go. Relax." (Relax 10 seconds).

B. Half as hard looking to right (Tense 5-10 seconds, Relax 10 seconds).

C. Imagine looking to right (Tense 5-10 seconds, Relax 10 seconds).

Repeat to left.

Exercise 14

Face Muscles

A. "Now (pause), I would like you to make a very grotesque face using all the muscles in your face. Tense your eyes shut, make an exaggerated smile. Feel the tension." (Hold 8-10 seconds). "Relax. Let your face completely relax." (Relax 10-15 seconds).

B. Half as tense a face (Tense 8-10 seconds, Relax 10-15 seconds).

C. Imagine a tense face (Tense 8-10 seconds, Relax 10-15 seconds).

Exercise 15

After they have finished Exercise 14 and are very relaxed, have them follow these directions: "Now, I would like you to imagine a field. Become aware of the grass in the field. Flowers. Become aware of the shrubs and trees. Become aware of the sky and any clouds in the sky. Become aware of the sun and the warmth of the sun against your body. Become aware of the wind. Be

aware of any sounds you hear. Be aware of any smells. Imagine your scene." (Let them imagine for about 20-30 seconds). Then say, "Turn that scene off and become aware of your body. Relax. Let any tensions go in your body." (Relax 15-20 seconds).

Repeat the above exercise two more times. This procedure gets the group members beginning to sharpen their ability to imagine, a skill necessary for the successful completion of the hierarchy.

After Exercise 15, as at the end of all previous exercises, tell them, "When I count to 10, I want you to open your eyes and feel comfortable, relaxed, and at ease. 1, 2, 3, ..., 10. Just lie there and be aware of your body. You can get up as you feel comfortable."

The above 15 exercises should only take two forty-minute sessions to complete; however, it is not unusual for Stage 2 to take three sessions.

Stage 3

Stage 2 involves the actual desensitization to the anxiety hierarchy. At this point, the group members are atuned to body tension and its control as well as having a greater ability to use their imaginations. All that is necessary to begin the actual desensitization procedure is to start each session by saying, "Just lie down. Find a comfortable spot. Close your eyes. Now let your self relax. Relax your feet (pause), your legs (pause), your stomach (pause), let your breathing be comfortable and easy, taking longer to exhale than inhale (pause), relax

your arms and hands (pause), relax your neck and shoulders (pause), relax your face and head (pause), and relax your jaw (pause). Let your jaw be relaxed and loose. Relax."

After they are relaxed, begin step one on the hierarchy, and all other steps on the hierarchy, by saying, "Now I'd like you to imagine as vividly and as clearly as possible yourself . . . (the actual sentence)."

The length and number of times to imagine each scene will depend on position of the scene in the hierarchy. The table below gives as example of length and number of times to imagine a certain scene.

Table 1

Levels	1-3	4-6	7-9	10-12	13-15	16-18
Seconds to imagine	15	17	19	21	23	25
Seconds to relax	15	17	19	21	23	25
Repetitions per scene	3	3	4	4	5	5

That is, when working with level 7 on the hierarchy, the client will imagine the scene for 20 seconds, relax for 20 seconds, four times. He or she will do this for levels 8 and 9 as well. After level 9 the therapist will have them open their eyes and feel relaxed, comfortable, and at ease when the therapist counts to 10.

One will notice from Table 1 that not only is the client being exposed to greater dosages of the hierarchy, but he or she is also imagining each scene longer and more often with each succeeding set of these scenes. It is hypothesized that this method takes into account possible initial felt anxiety and allows

the client a greater chance to experience some relaxation while imagining a difficult scene. This is an alternative, as yet unresearched, to Wolpe's suggested procedure of three anxiety-free repetitions before proceeding to the next step in the hierarchy.

The following hierarchies are examples and can be used as standardized hierarchies. The reader is again referred to Emery and Krumboltz (1967) for other standardized hierarchies.

Example 1

1. First time the teacher mentions the test, a few weeks or a month before the test.
2. A few days before the test; trying to study.
3. The night before the test, trying to cram in my head what I don't know and realizing that time is almost up.
4. The morning of the test.
5. At school, a few minutes before the class.
6. Entering the classroom of the test.
7. Sitting at my desk, trying to collect my thoughts.
8. The teacher enters, and pulls out the tests.
9. The teacher hands out the tests.
10. I watch them being handed towards me.
11. I get the test on my desk and wait until the teacher says go.
12. The first question is read, and I don't know the answer to it.

Example 2

1. Getting a syllabus indicating tests will be given at

some future date.

2. Three days before the test, you study for the test, and are thinking about what's going to be asked on the test.

3. The last day before the test, and you're wondering what you haven't covered and what could be asked and that you may not know enough.

4. The morning of the test and you have gotten up earlier and you know the test is going to be in a few hours.

5. Coming to or being on campus reviewing your notes just prior to the test and still wondering if it is enough.

6. Walking to the classroom to take the test and approaching the door.

7. Walking into the classroom and finding a seat, the instructor isn't there yet, and you're wondering where he is, wishing it would get started.

8. He walks in and starts to pass out the test on the other side of the room, you finally get the test, and you know you only have a certain amount of time to finish.

9. Looking at the test and not immediately knowing the answer to the first couple of questions.

10. Going back to the ones you didn't know at first, and putting down an answer you're still not sure of, and handing it in.

Example 3

1. Assignment is given.
2. Driving home with studying to do.
3. Telling everyone I am going to study.
4. Getting into the book.

5. Choosing important points.

6. Outlining.

7. Studying last minute points.

8. First look at test.

9. First question that I can't remember answer (but know it).

10. First question that I can't answer at all.

11. Reviewing answers before handing in test.

Discussion

The above techniques can be a useful tool in the repertoire of the skilled, mature counselor. Such a procedure can be a way of maximizing counselor effect at a time when service demands are exceeding counseling center expectations as well as, more literally, resources.

Such a procedure need not be limited to testing anxiety, but can be used in assertive training, social anxiety, speech anxiety, and many other anxiety producing situations.

The counselor must serve as a model to persons suffering from debilitating anxiety. He or she must feel relaxed and must have gone through the relaxation procedure his or her self. The notion, "Don't profess what you haven't experienced yourself," applies to the above procedure. As in all types of therapy situations, the counselor becomes a strong reinforcer. The relaxed therapist can reinforce the client's own relaxed state because the neurotic threat expectancy is not being reinforced, and thus anxiety is inhibited.

The skilled, resourceful counselor is only limited by his imagination in the form of delivery of the above procedure. Such a procedure can be videotaped and used in a learning resources lab. Trained and supervised paraprofessionals can responsibly perform the procedure, thereby magnifying the effect of the professional. Such a technique can be, and has been, utilized as one part of a study skills workshop.

When many counseling centers are under attack by administrators, largely due to a lack of information, the above procedure can be only one small step in making the counseling center a visible part of the academic thrust of the institution, thereby helping to diminish the "frill philosophy" of many administrators.

The above procedure can be considered a primary preventive mental health measure. On questionnaire after questionnaire, students consistently see academic problems as precipitation emotional upsets. The above procedure can do much to build a sense of mastery which can generalize or transfer to a wide variety of non-academic life press situations.

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